

Curriculum vitae

updated on December 2019

PERSONAL INFORMATION

Name: Michela Meo

Nationality: Italian

Date of birth: 10 December 1968

URL for web site: <http://www.telematica.polito.it/public/faculty/michela-meo>

EDUCATION

1993-1997 PhD in Electronic and Telecommunication Engineering, Politecnico di Torino

1987-1993 Laurea Degree (Summa cum laude) in Electronic Engineering, Politecnico di Torino

POSITIONS

03/17-03/18 Deputy rector of Politecnico di Torino

2016-today Full Professor at Politecnico di Torino

2006-2016 Associate Professor at Politecnico di Torino

1999-2006 Assistant Professor at Politecnico di Torino

EDITORIAL ACTIVITY

- Area editor of IEEE Transactions on Green Communications and Networking (January 2017-today).
- Associate editor of ACM/IEEE Transactions on Networking (June 2012-June 2016).
- Associate editor of IEEE Communications Surveys and Tutorials (starting on August 2014).
- Associate editor of IEEE Journal on Selected Areas of Communications - Green Communications Series (January 2015-December 2016).
- Editor of a book on Green Communications with Wiley (June 2015).
- Editor of a Special Session of IEEE Transactions on Green Communications and Networking on Energy Efficiency for Internet of Things, to appear in December 2020.
- Guest-editor of Elsevier Computer Communications, Special Issue on Selected papers from ISCC 2019, to appear in 2020.
- Guest-editor of Elsevier Computer Networks, Special Issue on Traffic and performance in the big data era, February 2016.
- Guest-editor of IEEE Internet Computing Magazine, Special Issue on Sustainable Internet, January 2013.
- Guest-editor of Elsevier Computer Networks, Special Issue on Selected papers from the 3rd International Workshop on QoS in multiservice IP networks, June 2006.
- Guest-editor of Elsevier Computer Networks, Special Issue on Selected papers from the 2nd International Workshop on QoS in multiservice IP networks, March 2004.
- Guest-editor of Performance Evaluation, Special Issue on the 2nd Internet Performance Symposium of Globecom, 2004.
- Guest-editor of ACM Wireless Networks, Special Issue on Selected Papers from the 5th ACM Intrnl. Workshop on Modeling, Analysis and Simulation of Wireless and Mobile Systems, 2004.
- Guest-editor of ACM Wireless Networks, Special Issue on Selected Papers from the Fourth ACM Intrnl. Workshop on Modeling, Analysis and Simulation of Wireless and Mobile Systems, 2003.

- Guest-editor of ACM Mobile Networks and Applications, Special Issue on Analysis and Design of Multi-service Wireless Networks, 2002.

ORGANIZATION OF SCIENTIFIC EVENTS IN LEADING ROLES

- **Chair** of the **International Advisory Council** of the International Teletraffic Conference. The IAC gathers a number of technical experts in the field of network and service performance, management, and assessment. The Council, similarly to a Steering Committee, organizes the ITC conference and related initiatives.
- **Chair** of the **Steering Committee** of IEEE OnlineGreenComm (2013-2018). IEEE Online GreenComm was a Portfolio conference of the IEEE Communications Society on Green Communications, the conference was fully held online.
- **Technical Program Chair** of the International Symposium on Computer and Communications (ISCC), Barcelona, Spain, July 2019. As special issue with selected papers from the conference is under preparation.
- **General Chair** of the The First Workshop on Sustainable networking through Machine Learning and Internet of things (SMILING), in conjunction with IEEE INFOCOM 2019, Paris May 2019.
- **Technical Program Chair** of IEEE ICC Green Communications systems and networks symposium, (ICC 2017), Paris, May 2017.
- **Technical Program Chair** of International Teletraffic Conference (ITC) 2015.
- **General Chair** of 2013 IEEE OnlineConference on Green Communications, September 2013.
- **Member of the International Federation for Information Processing (IFIP)** working group 7.3 on Computer System Modeling. The work of the Group is focused on analyzing and optimizing performance and costs of data processing systems through the use of analytical models.
- **Technical Program Chair** of the International Teletraffic Conference, ITC 27, September 2015.
- **Technical Program Chair** of the Infocom Miniconference, April 2013.
- Organization and chairing of the technical session on "Greening of the Wireless Internet," in the International European Wireless 2010 Conference, Lucca, Italy, April 2010.
- **Technical Program Chair** of 2012 IEEE Online Conference on Green Communications, September 2012.
- **Technical Program Chair** of IEEE Communications and Control for Sustainable Energy Systems: Green Networking and Smart Grid, in conjunction with IEEE INFOCOM 2012, April 2012.
- **Technical Program Chair** of the 14th IEEE Symposium on Computers and Communications (ISCC'09), July 2009.
- **Technical Program Chair** of IEEE 1st Intrnl. Workshop on Mobile Vehicular Networks, 2007.
- **Technical Program Chair** of IEEE 3rd Intrnl. Workshop on QoS in Multiservice IP Networks, 2005.
- **General Chair** of the 5th ACM International Workshop on Modeling and Simulation of Wireless Systems (MSWiM), September 2002.
- **Technical Program Chair** of the 4th ACM International Workshop on Modeling and Simulation of Wireless Systems (MSWiM), July 2001.
- **Technical Program Chair** of the 3rd ACM International Workshop on Modeling and Simulation of Wireless Systems (MSWiM), August 2000.
- **Member of the Technical Committee** of about 100 International Conferences, including ACM Sigmetrics, IEEE Infocom, IEEE Globecom, IEEE ICC, Performance Evaluation

RESPONSABILITIES

- Member of the **Board of Directors** of TopIX, a consortium of 86 IT companies developing and managing the regional network infrastructure, as representative of Politecnico di Torino, 30 employees (2018-today).
- Member of the **Scientific Advisory Board** of CSI Piemonte, a consortium for Information Technology Systems for Public Administration in Piedmont Region, 1200 employees (2011-2018).
- Member of the **Board of Directors** of CSP, a private-public company developing innovation in the IT for public and private companies, as representative of Politecnico di Torino, 50 employees (2013-2018).
- Member of the **Academic Board of the PhD** in Electrical, Electronics and Communications Engineering in Politecnico di Torino.
- Member of the **PhD Evaluation Committees** of several PhD candidates in foreign universities.
- Member of the **Academic Senate** of Politecnico di Torino as representative of Associate Professors, two mandates (2011-2016).
- Member of the university committee for the development of the **strategies for research of Politecnico di Torino** (2011-2013).
- Member of the **expert panel on Informatics and Knowledge Technology** of the Research Foundation Flanders, FWO (2020-today).

INVITED TALKS ON GREEN NETWORKING

- **Keynote speaker** at EUNICE 2009 - The Internet of the Future, title of the speech: "Green networking: improving networks energy efficiency," Barcelona, Spain, September 2009.
- **Invited speech** at the 3rd International Workshop on Next Generation Green Wireless Networks, title of the speech: "Toward Sustainable Networking", October 2014, Rennes, France.
- **Keynote speech** at the Internal Conference on Green IT Solutions (ICGREEN), title of the speech: "Towards Sustainable Mobile Access Networks", Milan, Italy, July 2015.
- **Tutorial** at IEEE SoftCOM 2012, with title "From energy efficient networking to sustainable networking", Split, Croatia, September 2012.
- **Tutorial** at the 26th International Teletraffic Congress (ITC 26), with title "TRENDS in Green Networking", to be given in Karlskrona, Sweden, September 2014.
- **Invited lecture** at the 3rd COST 804 Training School on Energy Efficiency in Large Scale Distributed Systems, organized by the COST Action IC804; title of the lecture: " From energy efficient networking to sustainable networking," Vibo Valentia, Italy, April 2013.
- **Keynote speech** at the annual workshop organized by ICAR-CNR: "Toward Sustainable Networks", Le Castella, Italy, June 2018.
- **Invited speech** at the 5th International Workshop on Next Generation Green Wireless Networks, title of the speech: "Toward Sustainable Networks", Sheffield, UK, September 2018.
- **Keynote speech** at the final workshop organized by the SyNERgIT project; title of the speech: "Reducing Operational Costs of Geo-Distributed Data Centers ", Chemnitz, Germany, April 2019.
- **Invited speech** at the workshop on Future of Wireless Technologies organized by Huawei; title of the speech: "Greener RAN operation through machine learning," Stockholm, Sweden, June 2019.

- **Keynote speech** at the final workshop organized by the Scavenge EU project in conjunction with IEEE SoftCOM 2012; title of the speech: "Toward Greener Network Operation", Split, Croatia, September 2019.
- **Keynote speech** at the CoRes-Algotel annual workshop, to be held in May 2020 in Lyon, France; title of the speech: "Renewable energy for the sustainability of mobile networks".

SUPERVISION

- Several PhD students in Politecnico di Torino; among them Alessandro Finamore is now a Research Associate at Telefonica Research, Barcelona, Spain; Roberta Fracchia is product manager in Thales; France, Delia Ciullo is a post-doc in Eurecom, France.
- Three students of the Master of Science (MSc) in Information and Communication Systems at the International Hellenic University, Greece.
- Four post-docs: 3 of them after getting their PhD under my supervision another one joined the research group as a PhD.

Involvement in the following projects in the field of green networking.

- Responsible of Politecnico di Torino Research Unit for the FP7 Network of Excellence titled "Towards Real Energy-efficient Network Design (TREND)", coordinated by Prof. Ajmone Marsan; 3 years: 2010-2013.
- Representative of Politecnico di Torino in the GreenTouch Initiative, a consortium of 50 leading Information and Communications Technology (ICT) industry, academic and non-governmental research experts dedicated to reducing the carbon footprint of ICT devices, platforms and networks.
- Responsible of Politecnico di Torino Research Unit of a PRIN 2008 project (Italian national projects funded by the Ministry of Education), titled "Energy eFFicient teChnologIEs for the Networks of Tomorrow (EFFICIENT)", coordinated by Prof. Davoli of the University of Genova; 2 years: 2010-2011.

PUBLICATIONS

- Co-author of more than 80 papers in International journals, 3 book chapters, 140 papers in proceedings of International conferences and workshops
- h-index: 45, i-10 index: 146, no. of citations: 7636; according to Google Scholar in December 2019

SCIENTIFIC ACTIVITY

My research activity develops in the field of modeling of communication networks. During the years, I have been making important contributions to the understanding and the solution of significant technical challenges that accompanied the evolution of communication networks, through the proposal of models of various systems, with objectives that span from performance evaluation to network architecture and protocol design, from comparison of solutions to protocol parameters tuning and setting.

Michela Meo

In the last ten years, my research has focused mainly on green networking. The intuition of the importance of this topic led myself, and the people working with me on this topic, to propose some pioneering works in what can be considered to be one of the hottest topics in our field in the last decade. Today, our research group is recognized as one of the world leaders in green networking. In the first years, we have focused mainly on energy efficiency for mobile networks and large data centers. Lately, we are considering the interplay between communication networks and their power supply. Hence, we are focusing on sustainable systems powered with renewable energy sources and the interaction with the smart grid.

My contribution to the field is recognized by the large number of initiatives and offices I have been involved in on green networking: I am area editor of IEEE Transactions on Green Communications and Networking, I have chaired the Steering Committee of IEEE Online GreenComm, I have chaired the technical program committees of International Conferences on this field; I have edited two issues of International Journals on this topic and a book; I have been invited to present the activity (as keynote or invited speaker) at several conferences and other initiatives.

The impact of the outcomes of my research activity is summarized by my h-index being 45 with 7636 citations, according to Google Scholar in December 2019. My most cited paper is: "Optimal energy savings in cellular access networks," by Marco Ajmone Marsan, Luca Chiaraviglio, Delia Ciullo, Michela Meo, IEEE International Conference on Communications (ICC) 2009 (779 citations).